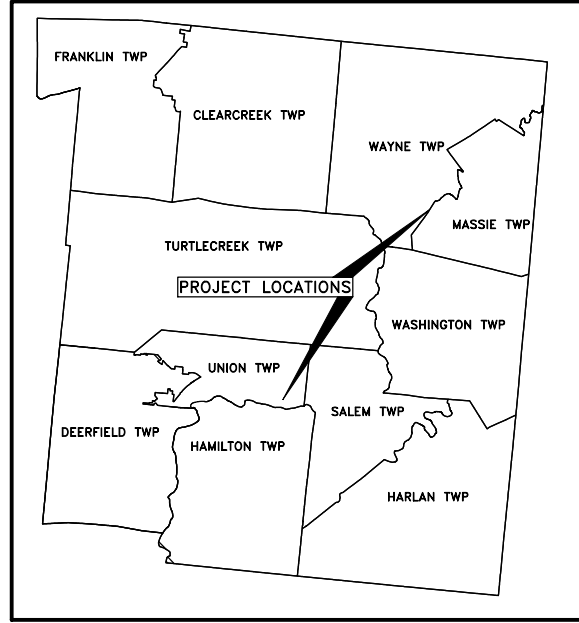


# WARREN COUNTY, OHIO



VICINITY MAP  
NOT TO SCALE

# WAR-VAR GUARDRAIL-FY25

## WARREN COUNTY, OHIO

### INDEX OF SHEETS:

TITLE SHEET	1
GENERAL NOTES	2-3
GENERAL SUMMARY	4
PLAN	5-14

### PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE REMOVAL OF OBSOLETE GUARDRAIL AND INSTALLATION OF NEW TYPE MGS GUARDRAIL AT VARIOUS LOCATIONS THROUGHOUT WARREN COUNTY, OHIO

### EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.88 ACRES

ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.05 ACRES

NOTICE OF INTENT EARTH DISTURBED AREA: 0.93 ACRES

### 2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

WARREN COUNTY GUARDRAIL LOCATIONS				
ROUTE	PROJECT BEGINS (MILEAGE)	PROJECT ENDS (MILEAGE)	LENGTH (FT)	EX. R/W
CR 35 LT.	1.028	1.260	1,225	50'
CR 36 LT.	3.101	3.123	112.5	60'
CR 36 RT.	3.103	3.230	675	60'
CR 37 LT.	6.896	7.378	2,525	60'
CR 37 RT.	6.896	7.367	2,512.5	60'
CR 38 RT.	5.338	5.848	2,687.5	60'
CR 38 RT.	6.073	6.270	1,037.5	60'

**UNDERGROUND UTILITIES**  
Contact Two Working Days  
Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764  
**(Non-members must be called directly)**

ENGINEERS SEAL:

SIGNED: \_\_\_\_\_  
DATE: \_\_\_\_\_

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
MGS-1.1	7/16/21	MT-97.10	4/19/19	SS800 10/20/23	
MGS-2.1	1/19/18	MT-105.10	1/17/20	SS832 7/21/23	
MGS-2.3	1/20/23	TC-61.30	7/19/19		
MGS-4.2	7/19/13				
MGS-4.3	1/18/13				
MGS-5.3	7/15/16				

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY. PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_ WARREN COUNTY ENGINEER

L:\ENGINEER\PROJECTS\Guardrail\HSP\2026\DWG\Clarksville, Mason Morrow Milgrove, Stubbs Mill Proposed Guardrail

FEDERAL PROJECT NO. E230452  
PID NO. 114003  
CONSTRUCTION PROJECT NO. -  
RAILROAD INVOLVEMENT NONE  
WAR-VAR GUARDRAIL-FY25  
1/14

**SPECIFICATIONS**

EXCEPT AS OTHERWISE SPECIFIED HEREIN, ALL WORK SHALL BE DONE AND MATERIAL FURNISHED IN ACCORDANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS), 2023 EDITION AND THE TECHNICAL SPECIFICATION OF THE WARREN COUNTY ENGINEER, MOST CURRENT EDITION.

**UTILITIES**

THE CONTRACTOR SHALL CAUSE NOTICE TO BE GIVEN TO THE OHIO UTILITIES PROTECTION SERVICE (OUPS) (TELEPHONE 1-800-362-2764, TOLL FREE), THE OHIO OIL AND GAS PRODUCERS PROTECTIVE SERVICE (TELEPHONE 1-800-925-0988, TOLL FREE) AND THE OWNERS OF UTILITY FACILITIES SHOWN ON THE PLANS WHO ARE NOT MEMBERS OF REGISTERED UNDERGROUND UTILITY PROTECTION SERVICE IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. THE ABOVE MENTIONED NOTICE SHALL BE GIVEN AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

THE IDENTITY AND LOCATION OF THE EXISTING UNDERGROUND UTILITY FACILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 OF THE OHIO REVISED CODE. THE OWNER AND/OR ENGINEER ASSUME NO RESPONSIBILITY AS TO THE ACCURACY OR THE DEPTHS OF THE UNDERGROUND UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS.

SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. EXISTING UTILITY POLES WITHIN THE INFLUENCE OF THE TRENCH SHALL BE SECURED BY THE UTILITY OWNER PRIOR TO ANY EXCAVATION IN THE AREA. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE UTILITY OWNER. IN THE EVENT THAT AN EXISTING UTILITY MUST BE RELOCATED, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE RELOCATION WITH THE OWNER OF THE AFFECTED UTILITY.

LISTED BELOW ARE ALL THE UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

**STUBBS MILL ROAD SECTION:**

ALTA FIBER/CINCINNATI BELL:  
BRECK M. COWAN, CPM  
SPECIALIST-STRUCTURE ENGINEER  
221 E 4TH ST. (BUILDING 121-900)  
CINCINNATI, OH 45202  
(513)-565-7187 OFFICE  
(513)-702-1040 CELL  
BRECK.COWAN@ALTA FIBER.COM

SPECTRUM-CHARTER:  
KENT RIEGER  
CONSTRUCTION COORDINATOR  
10920 KENWOOD RD.  
CINCINNATI, OH 45242  
(513)-386-5499 OFFICE  
(513)-233-5678 CELL  
KENT.RIEGER@CHARTER.COM

DUKE ELECTRIC:  
NICK HAMILTON  
ENGINEERING SPECIALIST-ASSET DESIGN  
7600 COLERAIN AVE.  
CINCINNATI, OH 45207  
(513)-514-8214 OFFICE  
(513)-240-8825 CELL  
NICHOLAS.HAMILTON@DUKE-ENERGY.COM

VERIZON: OLD MCI METRO LINE:  
BRUCE TURKIEWICZ  
ENGINEER III SPEC-OUTSIDE PLANT  
8800 GOVERNORS HILL DR.  
CINCINNATI, OH 45249  
(254)-721-8977  
BRUCE.TURKIEWICZ@VERIZONWIRELESS.COM

WARREN COUNTY WATER & SEWER:  
CHRIS WOJNICZ, P.E., LEED AP  
ASSISTANT SANITARY ENGINEER  
406 JUSTICE DR.  
LEBANON, OH 45036  
(513)-695-1646  
CHRISTOPHER.WOJNICZ@CO.WARREN.OH.US

WESTERN WATER:  
KURT MEEKER  
(513)-899-3211  
KMEEKER@WESTERN-H2O.COM

COMNET, INC./INDEPENDENT FIBER NETWORKS:  
SARAH EMANS  
OSP MANAGER  
PLANT GIS & DESIGN  
13888 CO RD. 25A  
WAPAKONETA, OH 45895  
(419)-739-3124 OFFICE  
(419)-905-6941 CELL  
SEMANS@CNITEAM.COM

**CLARKSVILLE ROAD SECTION:**

AES/DAYTON POWER & LIGHT:  
MICHAEL KHOR  
(513)-514-8210 OFFICE  
(513)-504-0082 CELL  
MICHAEL.KHOR@AES.COM

AT&T:  
ALAN STUTES  
AT&T ENGINEERING  
7201 FAR HILLS AVE.  
DAYTON, OH 45459  
(937)-708-1026  
ASI634@ATT.COM

TEXAS GAS TRANSMISSION/BOARDWALK PIPELINES:  
MICHAEL ECHOLS  
(513)-649-9074  
MICHAEL.ECHOLS@BWPIPELINES.COM

SPECTRUM-CHARTER:  
KENT RIEGER  
CONSTRUCTION COORDINATOR  
10920 KENWOOD RD.  
CINCINNATI, OH 45242  
(513)-386-5499 OFFICE  
(513)-233-5678 CELL  
KENT.RIEGER@CHARTER.COM

**MASON-MORROW-MILLGROVE ROAD SECTION:**

ALTA FIBER/CINCINNATI BELL:  
BRECK M. COWAN, CPM  
SPECIALIST-STRUCTURE ENGINEER  
221 E 4TH ST. (BUILDING 121-900)  
CINCINNATI, OH 45202  
(513)-565-7187 OFFICE  
(513)-702-1040 CELL  
BRECK.COWAN@ALTA FIBER.COM

DUKE ELECTRIC:  
NICK HAMILTON  
ENGINEERING SPECIALIST-ASSET DESIGN  
7600 COLERAIN AVE.  
CINCINNATI, OH 45207  
(513)-514-8214 OFFICE  
(513)-240-8825 CELL  
NICHOLAS.HAMILTON@DUKE-ENERGY.COM

DUKE GAS:  
JIM MARA  
DISTRIBUTION PROJECT SPECIALIST  
GAS OPERATIONS  
(513)-256-9041  
JAMES.MARA@DUKE-ENERGY.COM

WARREN COUNTY WATER & SEWER:  
CHRIS WOJNICZ, P.E., LEED AP  
ASSISTANT SANITARY ENGINEER  
406 JUSTICE DR.  
LEBANON, OH 45036  
(513)-695-1646  
CHRISTOPHER.WOJNICZ@CO.WARREN.OH.US

**NEW BURLINGTON ROAD SECTION:**

AES/DAYTON POWER & LIGHT:  
MICHAEL KHOR  
(513)-514-8210 OFFICE  
(513)-504-0082 CELL  
MICHAEL.KHOR@AES.COM

TALL GRASS ROCKIES EXPRESS PIPELINE:  
MIKE BUSSE  
(513)-262-7357 (CELL)  
MIKE.BUSSE@TALLGRASS.COM

ENTERPRISE PRODUCTS:  
TODD LUTES  
513-304-0020 (CELL)  
TJLUTES@EPROD.COM

BRIDGEWIRED:  
JEREMY FLOHRE  
JFLOHRE@BRIDGEWIRED.COM

ALTA FIBER/CINCINNATI BELL:  
BRECK M. COWAN, CPM  
SPECIALIST-STRUCTURE ENGINEER  
221 E 4TH ST. (BUILDING 121-900)  
CINCINNATI, OH 45202  
(513)-565-7187 OFFICE  
(513)-702-1040 CELL  
BRECK.COWAN@ALTA FIBER.COM

**SAFETY REQUIREMENTS**

THE CONTRACTOR AND SUBCONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTION AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.

**LIMITS OF WORK**

CONSTRUCTION ACTIVITIES SHALL BE CONFINED TO THE RIGHT-OF-WAY AND LIMITS OF CONSTRUCTION. THE CONTRACTOR SHALL NOT TRESPASS UPON OR IN ANY WAY DISTURB PRIVATE PROPERTY WITHOUT THE OWNER'S CONSENT, A COPY OF WHICH IS TO BE PROVIDED TO THE PROJECT ENGINEER PRIOR TO SUCH TRESPASS OR DISTURBANCE.

THE WORK LIMITS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE OF THESE WORK LIMITS.

**NOTIFICATION OF TRAFFIC RESTRICTIONS**

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE WARREN COUNTY ENGINEER'S OFFICE. THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

**NOTIFICATION TIME TABLE**

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMIT AND PIO
RAMP & ROAD CLOSURES	>=2 WEEKS >12 HOURS & <2 WEEKS <=12 HOURS	21 CALENDAR DAYS PRIOR TO CLOSURE 14 CALENDAR DAYS PRIOR TO CLOSURE 4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>=2 WEEKS <2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE 5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE

**SHOP-CURVED RAIL SECTIONS**

ALL RAILS WITH A RADIUS OF 5- FEET TO 70- FEET SHALL BE SHOP CURVED RAILS. APPROXIMATE RADII ARE INDICATED ON THE PLANS TO ASSIST THE CONTRACTOR IN PREPARING HIS BID. HOWEVER, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD DETERMINE THE NECESSARY RADII FOR EACH CURVED RAIL SECTION PRIOR TO CONSTRUCTION. THE COST OF SHOP-CURVED RAILS SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND PAYMENT SHALL BE INCLUDED IN THE BID FOR ITEM 606 - GUARDRAIL, TYPE MGS.

L:\ENGINEER\PROJECTS\Guardrail\HIS\2026\DWG\Clarksville, Mason Morrow Millgrove, Stubbs Mill Proposed Guardrail

GENERAL NOTES

WAR-VAR  
GUARDRAIL-FY25

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ITEM 202-GUARDRAIL REMOVED, AS PER PLAN

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING GUARDRAIL, PREPARE THE SITE, AND INSTALL NEW GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON THE SITE, READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED UNTIL SUCH TIME AS THE ENGINEER IS ASSURED OF COMPLIANCE.

W-BEAM GUARDRAIL REMOVED AS PART OF THIS CONTRACT SHALL REMAIN THE PROPERTY OF THE WARREN COUNTY ENGINEER AND SHALL BE TRANSPORTED BY THE CONTRACTOR AND DEPOSITED AT THE WARREN COUNTY HIGHWAY DEPARTMENT, 105 MARKEY ROAD, LEBANON, OH 45036.

W-BEAM RAILING THAT IS TO BE REMOVED AS PART OF THIS CONTRACT MAY NOT BE CUT WITHOUT THE APPROVAL OF THE ENGINEER.

ALL OTHER MATERIALS REMOVED AS PART OF THIS CONTRACT (POSTS, BOLTS, CONCRETE, ETC.) SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND THE CONTRACTOR SHALL DISPOSE OF THESE MATERIALS IN A LAWFUL MANNER AT NO ADDITIONAL COST TO THE WARREN COUNTY ENGINEER.

GUARDRAIL REMOVAL SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY FOR THE COMPLETE REMOVAL AND DISPOSAL OF RAILING AND EXISTING POSTS. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 202-EXISTING GUARDRAIL REMOVED, AS PER PLAN.

ITEM 202-ANCHOR ASSEMBLIES REMOVED, TYPE T, AS PER PLAN

ANCHOR ASSEMBLY REMOVAL SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY FOR THE COMPLETE REMOVAL AND DISPOSAL OF ANCHOR ASSEMBLIES, FOUNDATIONS AND POSTS AND FOR THE FILLING OF FOUNDATION HOLES.

W-BEAM GUARDRAIL REMOVED AS PART OF THIS CONTRACT SHALL REMAIN THE PROPERTY OF THE WARREN COUNTY ENGINEER AND SHALL BE TRANSPORTED TO AND DEPOSITED AT THE WARREN COUNTY HIGHWAY DEPARTMENT, 105 MARKEY ROAD, LEBANON, OH 45036. ALL OTHER MATERIALS REMOVED AS PART OF THIS CONTRACT (POSTS, BOLTS, CONCRETE, ETC.) SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND THE CONTRACTOR SHALL DISPOSE OF THESE MATERIALS IN A LAWFUL MANNER.

W-BEAM RAILING THAT IS TO BE REMOVED AS PART OF THIS CONTRACT MAY NOT BE CUT WITHOUT THE APPROVAL OF THE ENGINEER.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR THE ITEM 202-TYPE T ANCHOR ASSEMBLIES REMOVED, AS PER PLAN.

ITEM 614 - MAINTENANCE OF TRAFFIC

THE CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC TO EXISTING DRIVES AT ALL TIMES. ACCESS TO ALL PROPERTIES WITHIN THE PROJECT SHALL BE MAINTAINED AT ALL TIMES.

A MINIMUM OF ONE LANE OF TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF EXISTING PAVEMENT. LANE CLOSURES WITH FLAGGERS SHALL BE PROVIDED BY THE CONTRACTOR. IN ACCORDANCE WITH THE OHIO MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) AND STATE OF OHIO STANDARD CONSTRUCTION DRAWING MT-97.10 DURING THE CONSTRUCTION OF WORK EXCEPT AS OTHERWISE AUTHORIZED BY THE ENGINEER. THE CONTRACTOR SHALL SET UP AND OPERATE HIS EQUIPMENT IN SUCH A MANNER THAT ENCROACHMENT UPON THE TRAVELED WIDTH OF THE PAVEMENT WILL BE KEPT TO A MINIMUM. THE LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THE CONTRACTOR SHALL NOT BEGIN WORK WITHIN ANY PUBLIC RIGHT-OF-WAY UNTIL WARNING SIGNS ARE IN ACCEPTABLE POSITION IN ACCORDANCE WITH THE (OMUTCD).

ALL TEMPORARY AND PERMANENT TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

OVER-NIGHT LANE CLOSURES WILL NOT BE PERMITTED BETWEEN THE HOURS OF 5:00 PM AND 8:00 AM.

ALL PERMANENT TRAFFIC CONTROLS NOT IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROLS SHALL BE MAINTAINED THROUGHOUT THIS PROJECT BY THE CONTRACTOR. PERMANENT TRAFFIC CONTROLS MAY BE TEMPORARILY RELOCATED BY THE ENGINEER. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR MISSING, DAMAGED, AND IMPROPERLY PLACED SIGNS.

THE TRACKING OF MUD, DIRT, DEBRIS, OR SPILLAGE OF THE SAME UPON PAVEMENTS OR RESIDENTIAL DRIVES IS PROHIBITED AND ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. FAILURE TO REMOVE SAID MUD, DIRT, DEBRIS, OR SPILLAGE MAY RESULT IN THE OWNER PROVIDING THAT SERVICE AND THE COST OF THAT SERVICE BEING WITHHELD FROM MONIES WHICH MAY BECOME DUE TO THE CONTRACTOR.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614-MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

ITEM 606 - GUARDRAIL, TYPE MGS

AT SOME LOCATIONS IT MAY BE NECESSARY TO OMIT ONE POST WITHIN A STANDARD RUN OF MGS RAIL TO AVOID UTILITIES, CULVERTS, OR OTHER UNDERGROUND CONFLICTS. FIFTY FEET OF GUARDRAIL (WHICH MAY INCLUDE THE ANCHOR) SHOULD BE AVAILABLE BOTH UPSTREAM AND DOWNSTREAM OF THE OMITTED POST TO MAINTAIN TENSION AND STRENGTH IN THE SYSTEM.

PRECONSTRUCTION MEETING

PRIOR TO COMMENCEMENT OF THE CONSTRUCTION ACTIVITIES, THE WARREN COUNTY ENGINEER WILL ARRANGE A MEETING BETWEEN THE CONTRACTOR, SOUTHWEST OHIO SCENIC RIVERS REGIONAL MANAGER, AND THE WARREN COUNTY ENGINEER. THE TIME, DATE, AND LOCATION OF SAID MEETING WILL BE DETERMINED AFTER THE AWARDED OF THE PROJECT, AND ALL PARTIES WILL BE NOTIFIED BY THE WARREN COUNTY ENGINEER. AT THE PRECONSTRUCTION MEETING, THE CONTRACTOR SHALL SUBMIT TO THE PROJECT MANAGER A CONSTRUCTION SCHEDULE, LIST OF SUBCONTRACTORS, AND A LIST OF SUPPLIERS.

ITEM 606 - ANCHOR ASSEMBLY, MGS, TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEER'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH REBOUNDABLE RETROREFLECTIVE SHEETING, PER CMS 730.191.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606-ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

RIVER WORK COORDINATION

THE SOUTHWEST OHIO SCENIC RIVERS REGIONAL MANAGER SHALL RECEIVE A FINAL SET OF PLANS FOR REVIEW AND BE INVITED TO THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL NOTIFY THE OHIO DEPARTMENT OF NATURAL RESOURCES SOUTHWEST OHIO SCENIC RIVERS REGIONAL MANAGER SEVEN DAYS PRIOR TO PERFORMING ANY WORK NEAR THE LITTLE MIAMI RIVER. CONTACT INFORMATION IS:

SOUTHWEST OHIO SCENIC RIVERS REGIONAL MANAGER  
AARON ROURKE  
1750 OSBORN ROAD  
WILMINGTON, OHIO 45177  
937-382-1096 (OFFICE)  
937-230-8534 (CELL)

THE SOUTHWEST OHIO SCENIC RIVERS REGIONAL MANAGER SHALL CONDUCT A FINAL INSPECTION BEFORE THE COMPLETION OF THE PROJECT.

WHILE WORKING ADJACENT TO THE RIVER, THE CONTRACTOR SHALL NOT STORE ANY FUEL OR TOXIC/HAZARDOUS MATERIALS WITHIN THE 100 YEAR FLOODPLAIN OF THE LITTLE MIAMI RIVER. REFUELING OF EQUIPMENT SHALL NOT OCCUR IN THE FLOODPLAIN OR NEAR ANY DRAINAGE WAYS, DITCHES OR STREAMS. EQUIPMENT OPERATING ADJACENT TO THE RIVER SHALL BE INSPECTED DAILY FOR FUEL/LUBRICANT LEAKS AND PROMPTLY REPAIRED. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO CONTAIN ACCIDENTAL SPILLAGE OF ACCIDENTAL SPILLAGE OF HAZARDOUS MATERIALS DURING REFUELING OR EQUIPMENT SERVICING BY PREPOSITIONING ABSORBENT PADS, BOOMS, OR PREVENTATIVE MEASURES. PRIOR TO CONSTRUCTION, WARREN COUNTY ENGINEER'S OFFICE WILL INFORM THE CONTRACTOR REGARDING PROTOCOL FOR NOTIFYING EMERGENCY RESPONSE PERSONNEL IN THE EVENT OF A SIGNIFICANT SPILL.

CARE SHALL BE TAKEN TO PREVENT MATERIAL FROM ENTERING THE RIVER. ANY MATERIAL WHICH ENTERS THE RIVER SHALL BE REMOVED BEFORE WORK COMMENCES TO ENSURE THAT ALL MATERIAL, EQUIPMENT AND OTHER DEBRIS IS COMPLETELY REMOVED. ALL EXCESS CONSTRUCTION MATERIAL, EQUIPMENT AND OTHER DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE UPON COMPLETION OF THE PROJECT AND DISPOSED OF AT A PROPER UPLAND FACILITY ABOVE THE 100 YEAR FLOOD ELEVATION. DISPOSAL WITHIN WETLANDS, FLOODPLAINS, OR WITHIN 1,000 FEET OF THE LITTLE MIAMI RIVER IS PROHIBITED.

ALL STREAMBANK VEGETATION SHALL BE LEFT UNDISTURBED TO THE MAXIMUM EXTENT POSSIBLE. CUTTING OR CLEARING OF ANY RIPARIAN VEGETATION WITHIN 1,000 FEET OF THE LITTLE MIAMI RIVER BEYOND THE EXISTING RIGHT-OF-WAY SHALL BE PROHIBITED. VERTICAL TREE TRIMMING IS PERMITTED WHERE NECESSARY INSIDE EXISTING RIGHT-OF-WAY, CARE SHALL BE TAKEN NOT TO GIRDLE OR SCUFF TREE TRUNKS OR DAMAGE ANY STANDING TREES.

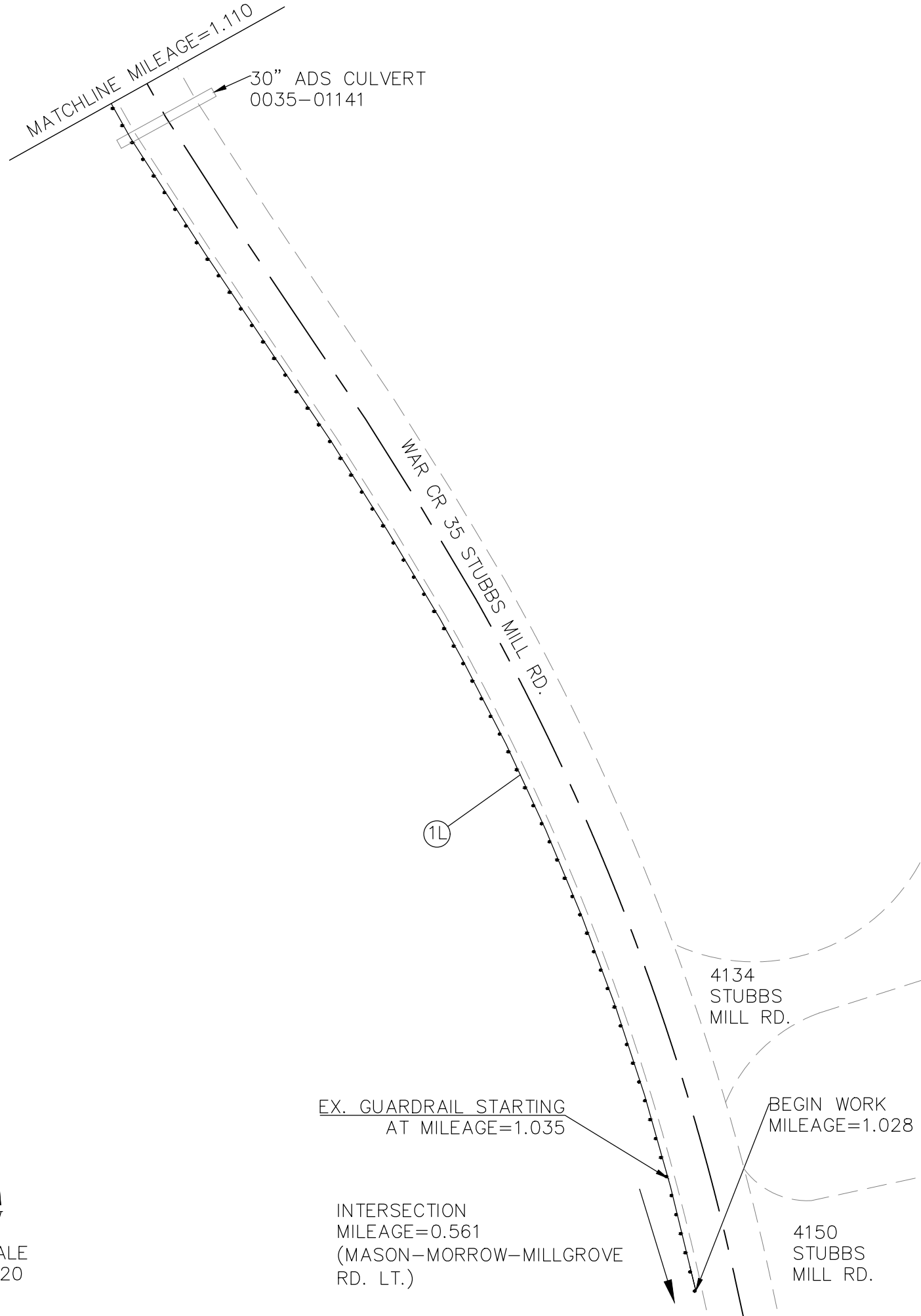
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OFFICE CALCS	SHEET NUMBER												PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	5	6	7	8	9	10	11	12	13	14									
	762.5	425	687.5	1,725 2	1,825	1,337.5 2	987.5	987.5	712.5	1,037.5				202	38001	10,487.5	FT	ROADWAY GUARDRAIL REMOVED, AS PER PLAN	3
														202	42041	4	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	3
														203	20000	6	CY	EMBANKMENT	
			587.5	1,612.5	1,825	1,312.5	937.5	987.5	662.5	887.5				606	15050	8,812.5	FT	GUARDRAIL, TYPE MGS	3
	750	375												606	15100	1,125	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
														606	17360	50	FT	GUARDRAIL, TYPE MGS LONG SPAN	
	1	1	4	3 3		2	1		1	2				606	26150	15	EACH	ANCHOR ASSEMBLY, MGS TYPE E, (MASH 2016)	3
														606	26550	3	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
	9	5	9	20	20	17	10	10	8	11				626	00110	119	EACH	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL)	
		1	2											630	84900	3	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
		1	2											630	86002	3	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
														614	11000	1	LUMP	INCIDENTALS MAINTAINING TRAFFIC	3
														624	10000	1	LUMP	MOBILIZATION	
														832	30000	1,000	EACH	EROSION CONTROL	

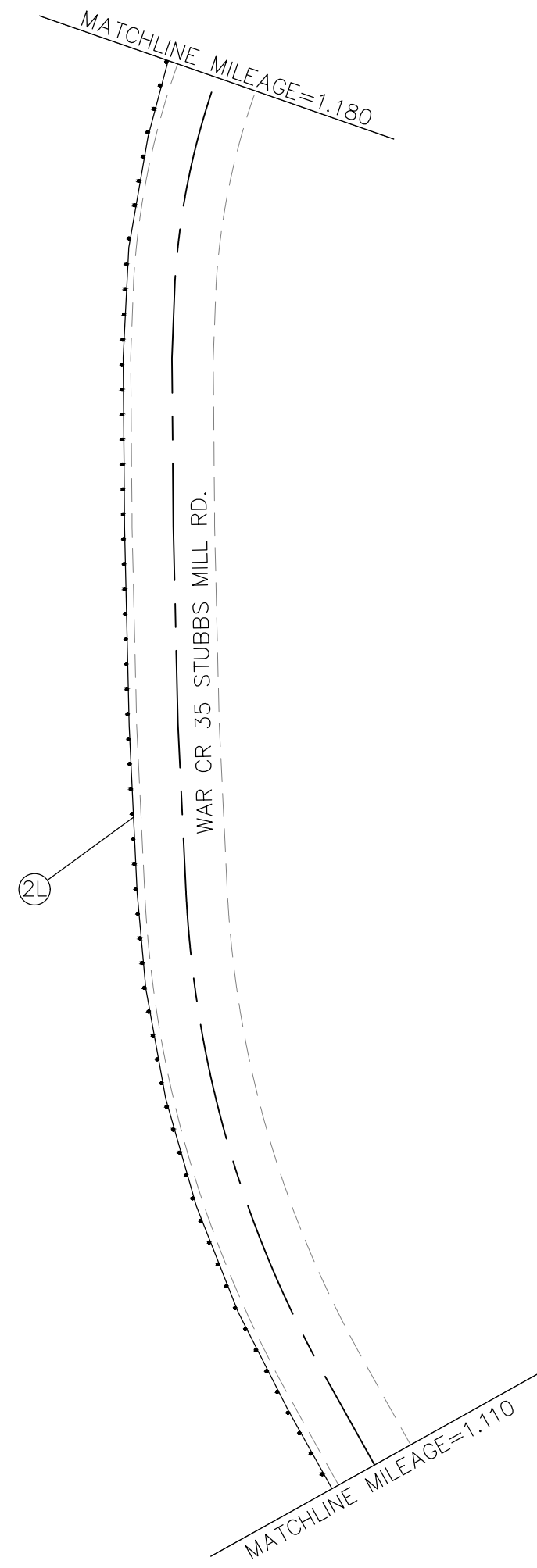
GENERAL SUMMARY

WAR-VAR  
GAURDRAIL-FY25

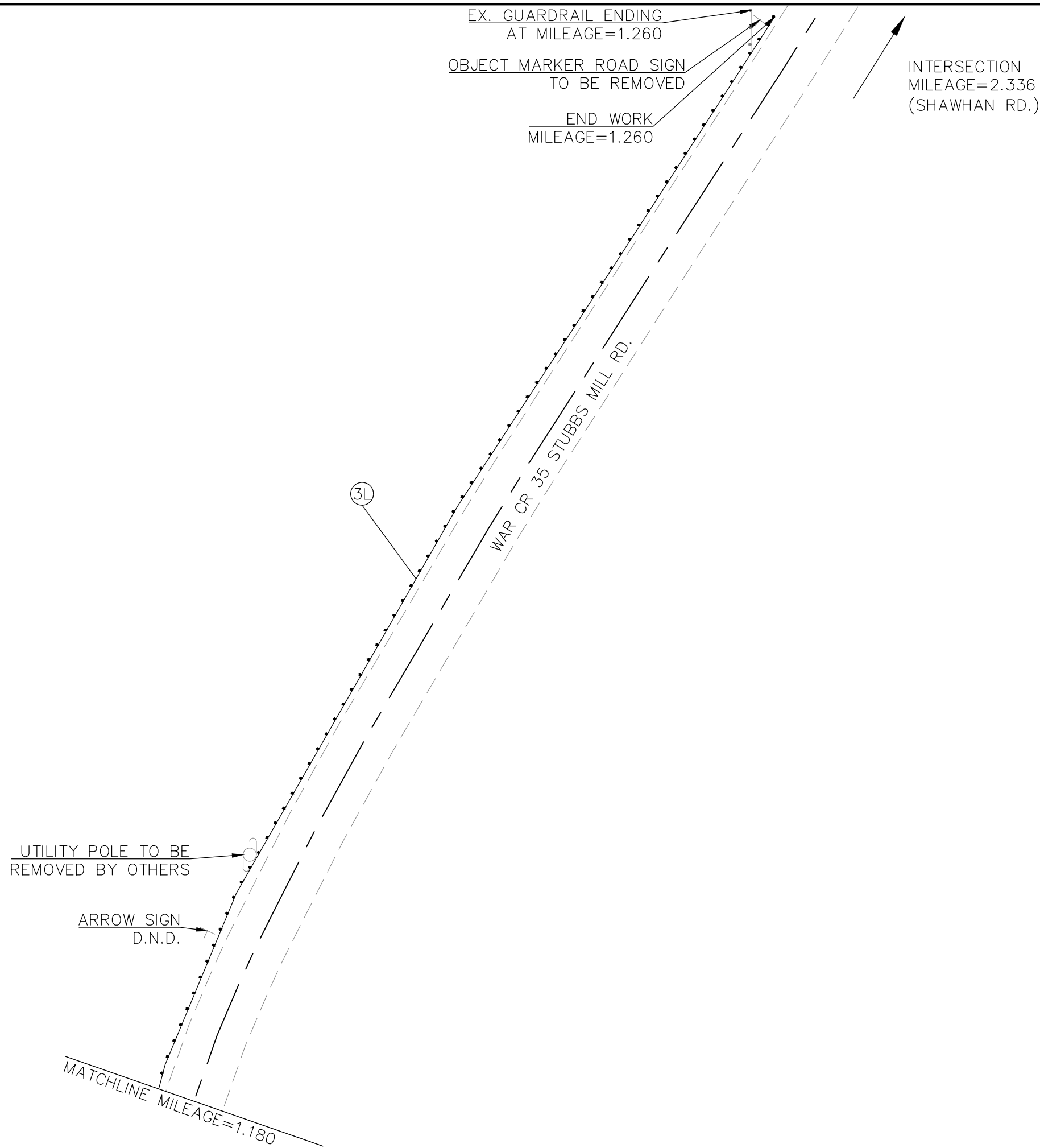
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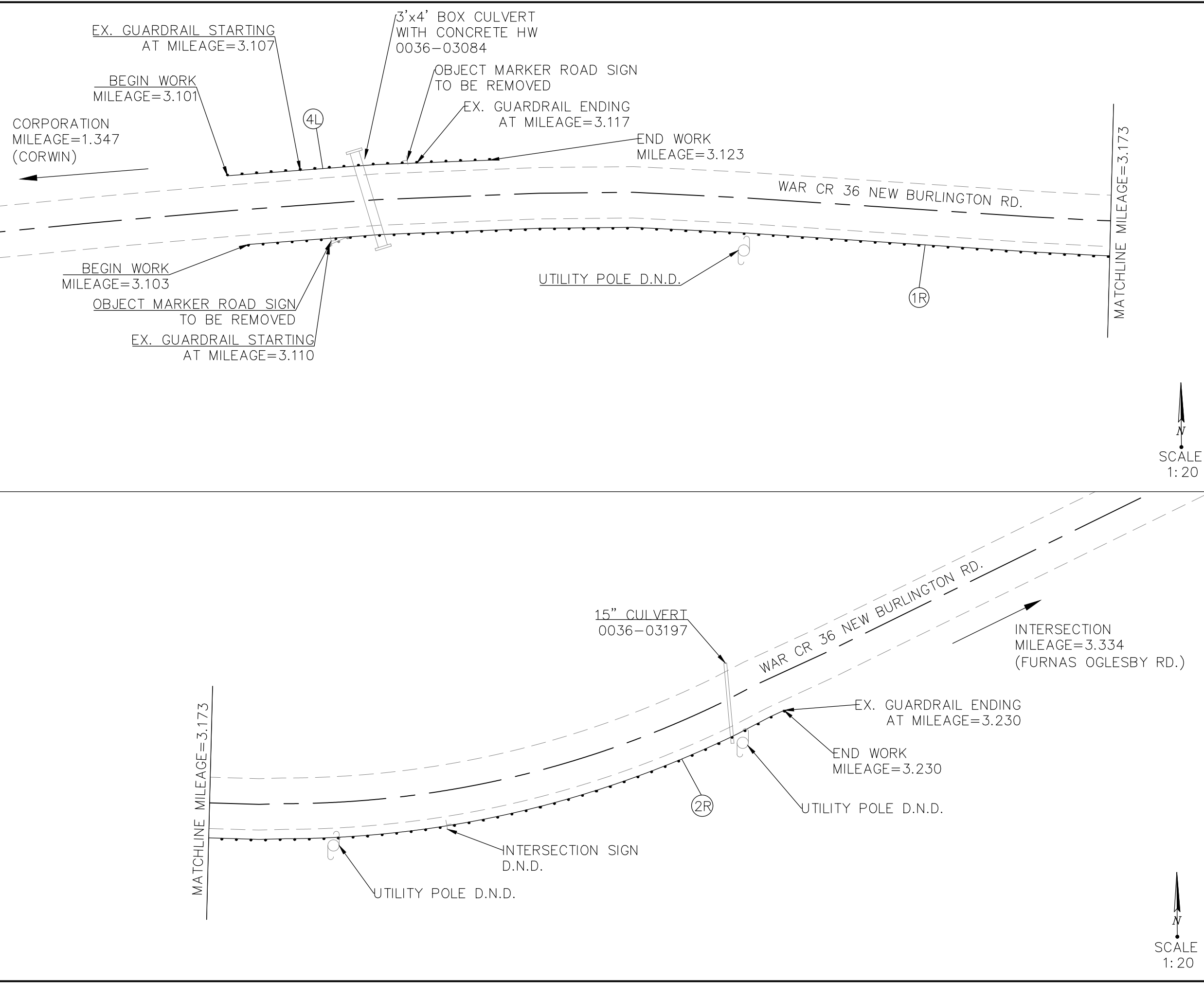
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REF. NO.	202	202	606	606	606	606	606	606	626	630	630	
1L	GUARDRAIL REMOVED, AS PER PLAN (FT)	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN (EACH)	GUARDRAIL, TYPE MGS (FT)	GUARDRAIL, TYPE MGS WITH LONG POSTS (FT)	GUARDRAIL, TYPE MGS LONG SPAN (FT)	ANCHOR ASSEMBLY, MGS TYPE E (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL) (EACH)	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (EACH)	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL (EACH)		
2L	394			381.5		1		5				
	368.5			368.5				4				
TOTAL TO GEN. SUMMARY	762.5			750		1		9				



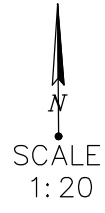
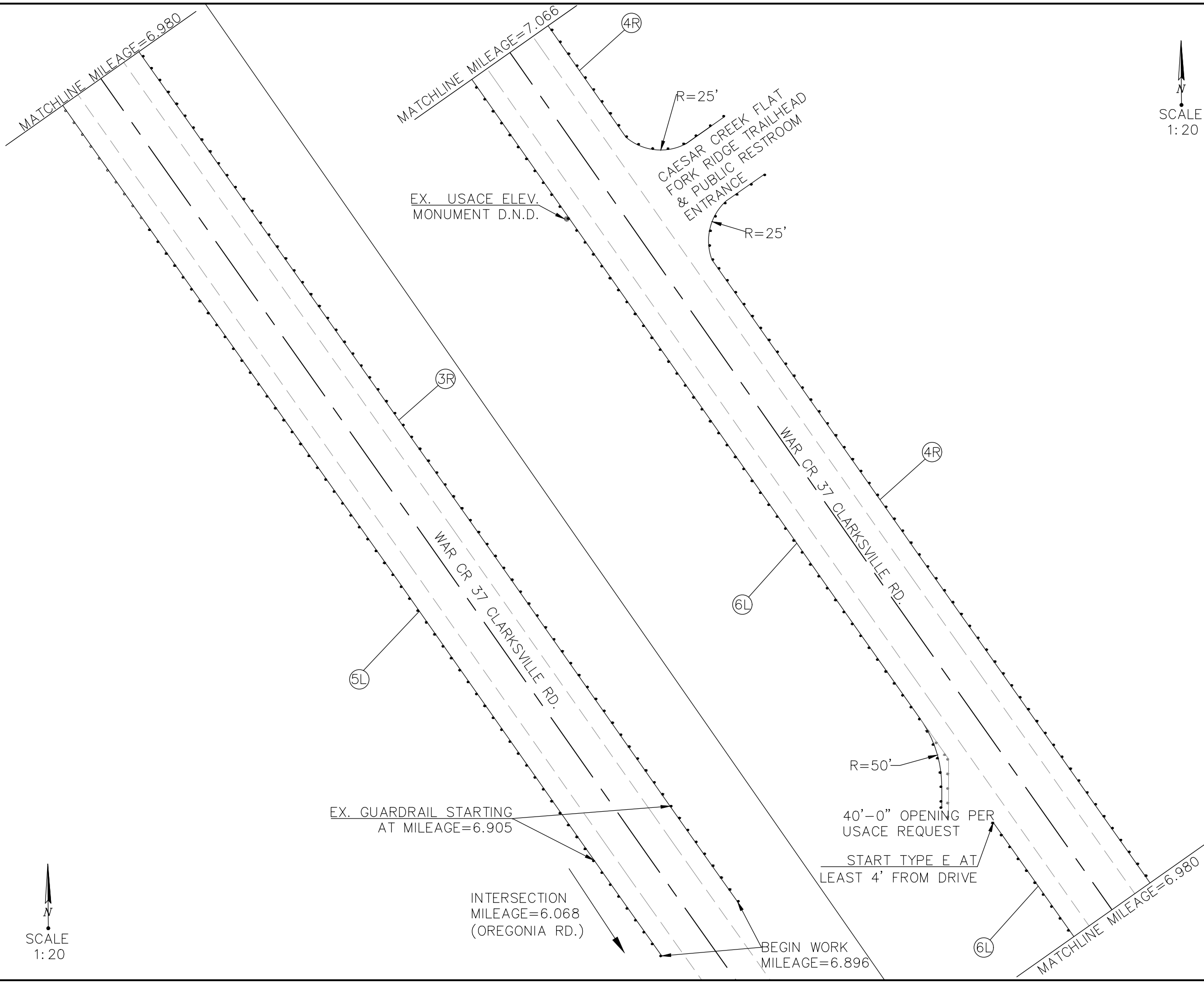
REF. NO.	202	202	606	606	606	606	606	606	626	630	630
	GUARDRAIL REMOVED, AS PER PLAN (FT)	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN (EACH)	GUARDRAIL, TYPE MGS (FT)	GUARDRAIL, TYPE MGS WITH LONG POSTS (FT)	GUARDRAIL, TYPE MGS LONG SPAN (FT)	ANCHOR ASSEMBLY, MGS TYPE E (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL) (EACH)	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (EACH)	REMOVAL OF GROUND MOUNTED SIGN SUPPORT AND DISPOSAL (EACH)
3L	425			375		1			5	1	1
TOTAL TO GEN. SUMMARY	425			375		1			5	1	1



SCALE 1:20

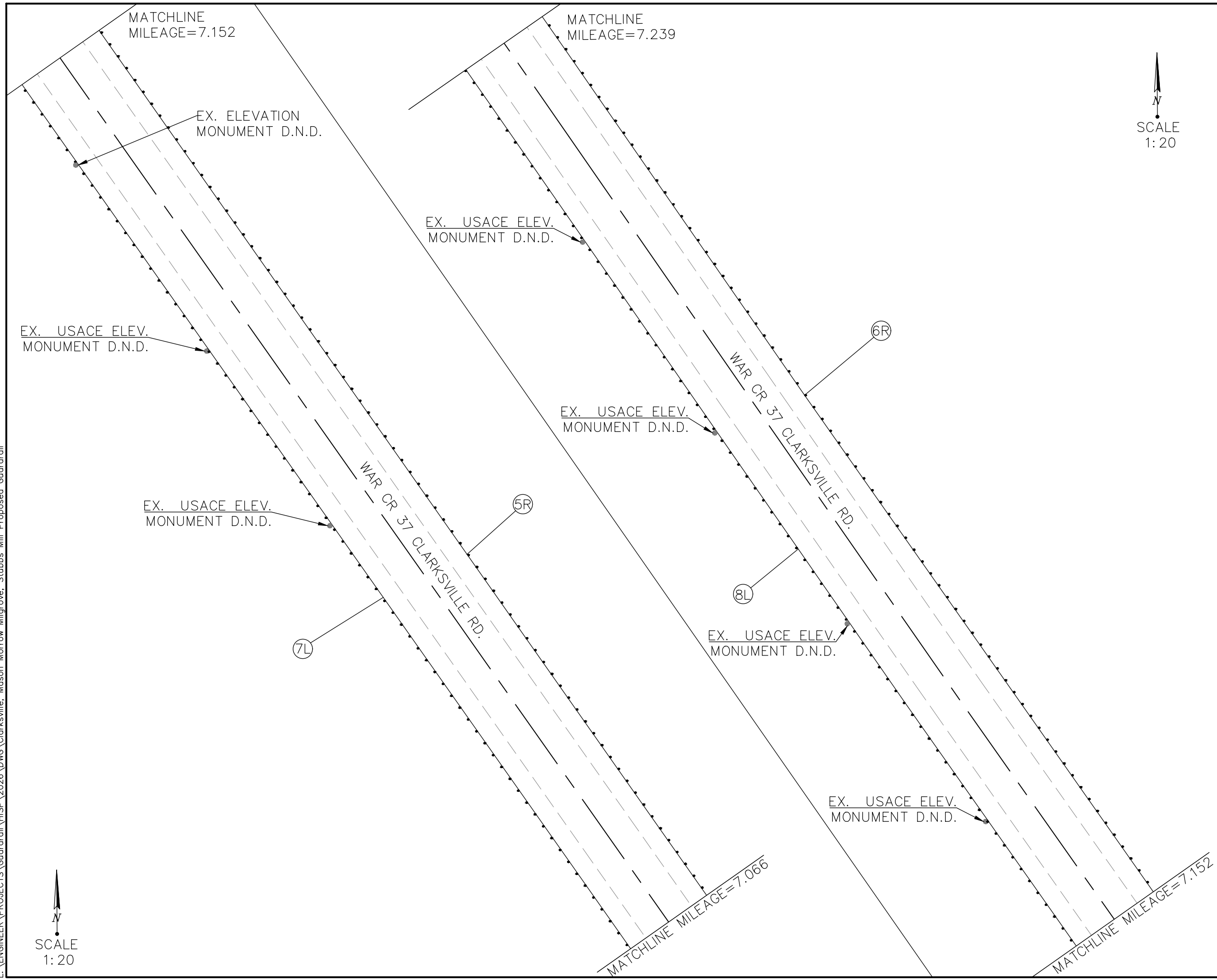
SCALE 1:20

REF. NO.	202	202	606	606	606	606	606	626	630	630
4L	GUARDRAIL REMOVED, AS PER PLAN (FT)	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN (EACH)	GUARDRAIL, TYPE MGS (FT)	GUARDRAIL, TYPE MGS WITH LONG POSTS (FT)	GUARDRAIL, TYPE MGS LONG SPAN (FT)	ANCHOR ASSEMBLY, MGS TYPE E (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL) (EACH)	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (EACH)	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL (EACH)
1R	50		12.5			2		3	1	1
2R	335		322			1		3	1	1
	302.5		253			1		3		
TOTAL TO GEN. SUMMARY	687.5		587.5			4		9	2	2

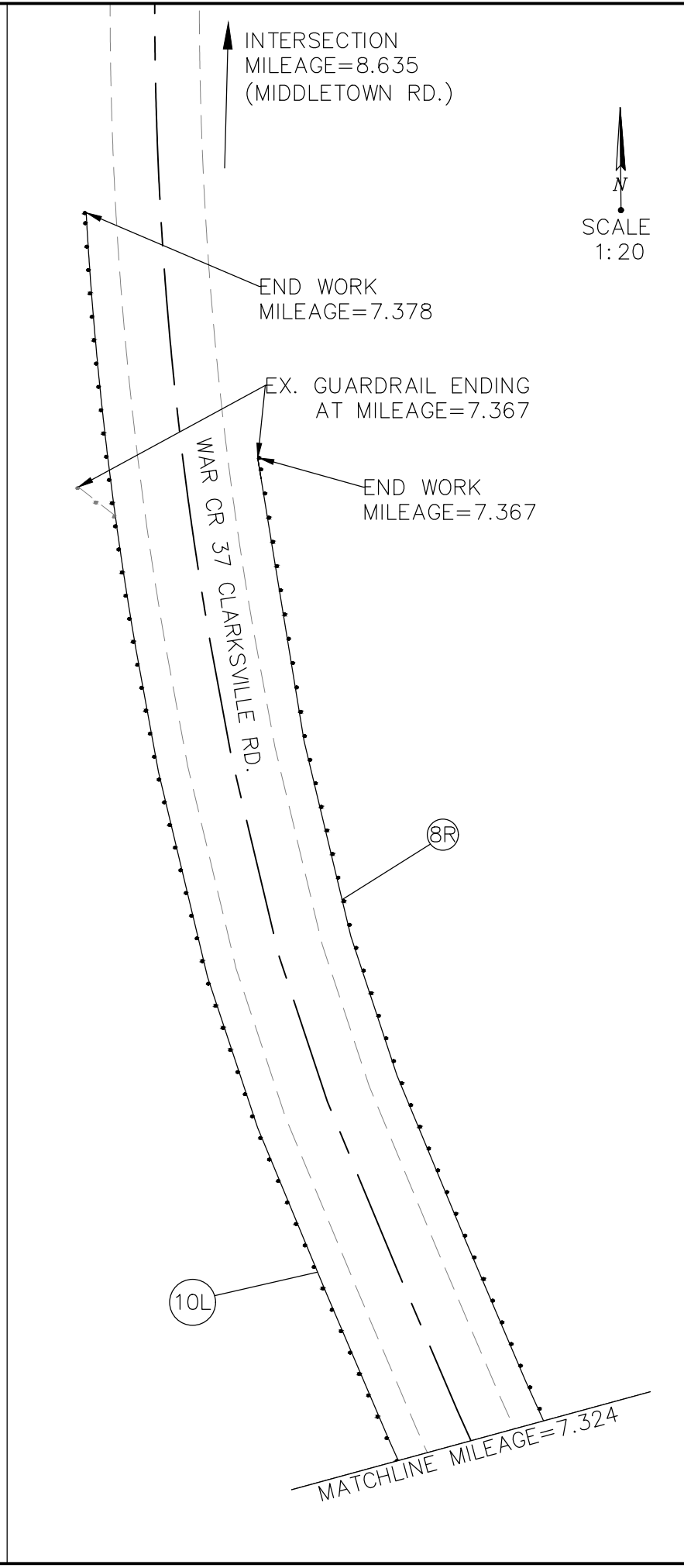
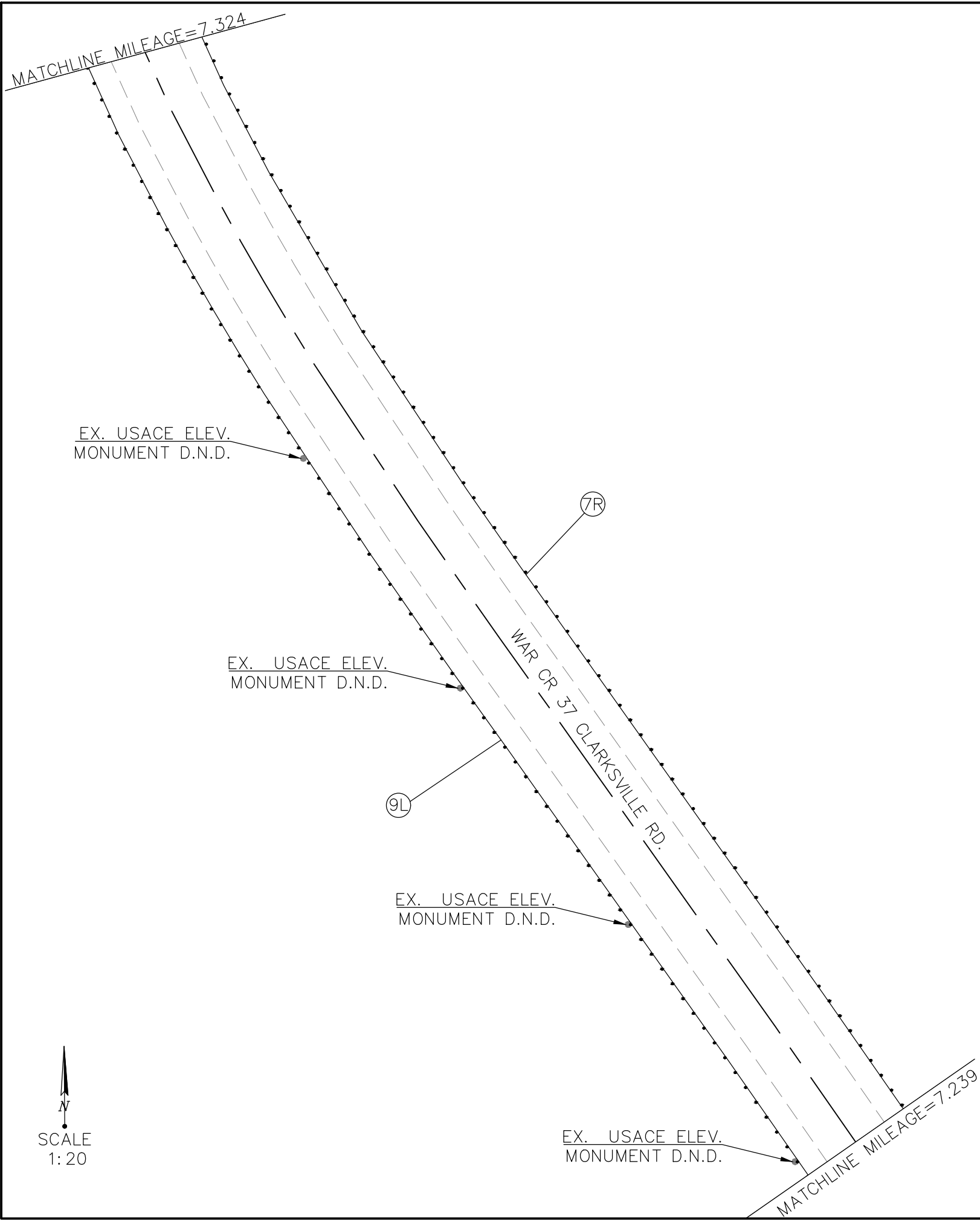


REF. NO.	202	202	606	606	606	606	606	606	626	630	630	
5L	GUARDRAIL REMOVED, AS PER PLAN (FT)	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN (EACH)	GUARDRAIL, TYPE MGS (FT)	GUARDRAIL, TYPE MGS WITH LONG POSTS (FT)	GUARDRAIL, TYPE MGS LONG SPAN (FT)	ANCHOR ASSEMBLY, MGS TYPE E (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL) (EACH)	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (EACH)	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL (EACH)		
6L	394	1	393			1	1	5				
3R	456	1	371.5			1	1	5				
4R	394		393			1	2	5				
	481		455									
TOTAL TO GEN. SUMMARY	1,725	2	1,612.5			3	3	20				

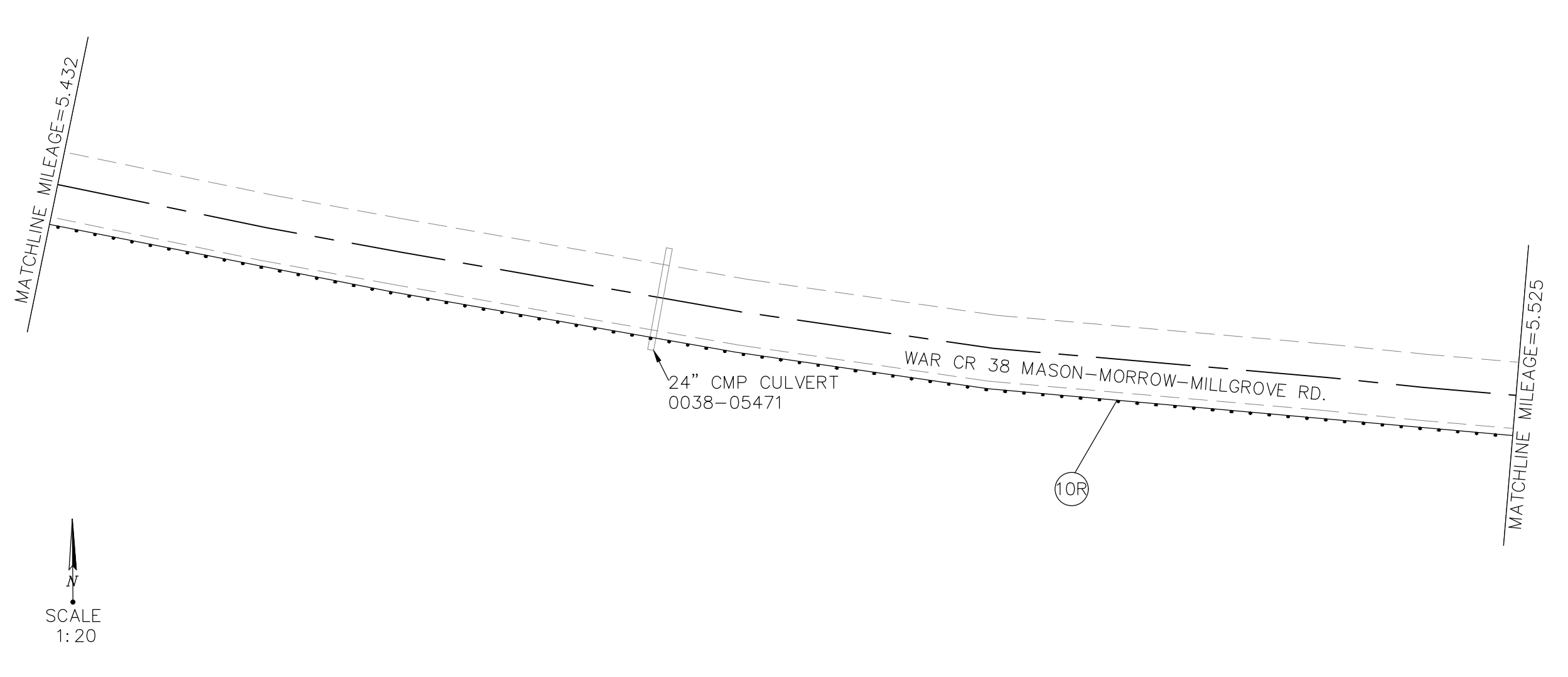
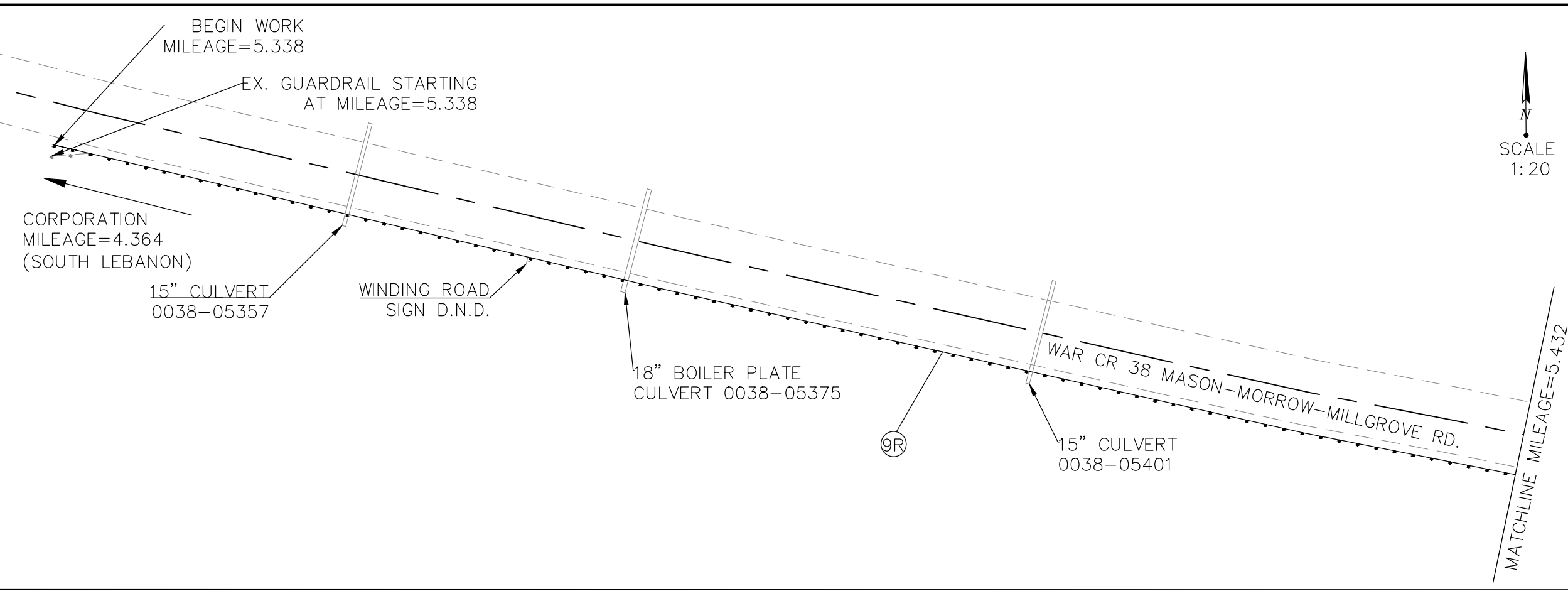




REF. NO.	202	202	606	606	606	606	606	606	606	626	630	630
7L	GUARDRAIL REMOVED, AS PER PLAN (FT)	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN (EACH)	GUARDRAIL, TYPE MGS (FT)	GUARDRAIL, TYPE MGS WITH LONG POSTS (FT)	GUARDRAIL, TYPE MGS LONG SPAN (FT)	ANCHOR ASSEMBLY, MGS TYPE E (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL) (EACH)	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (EACH)	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL (EACH)		
8L	454		454					5				
5R	458.5		458.5					5				
6R	454		454					5				
6R	458.5		458.5					5				
TOTAL TO GEN. SUMMARY	1,825		1,825					20				



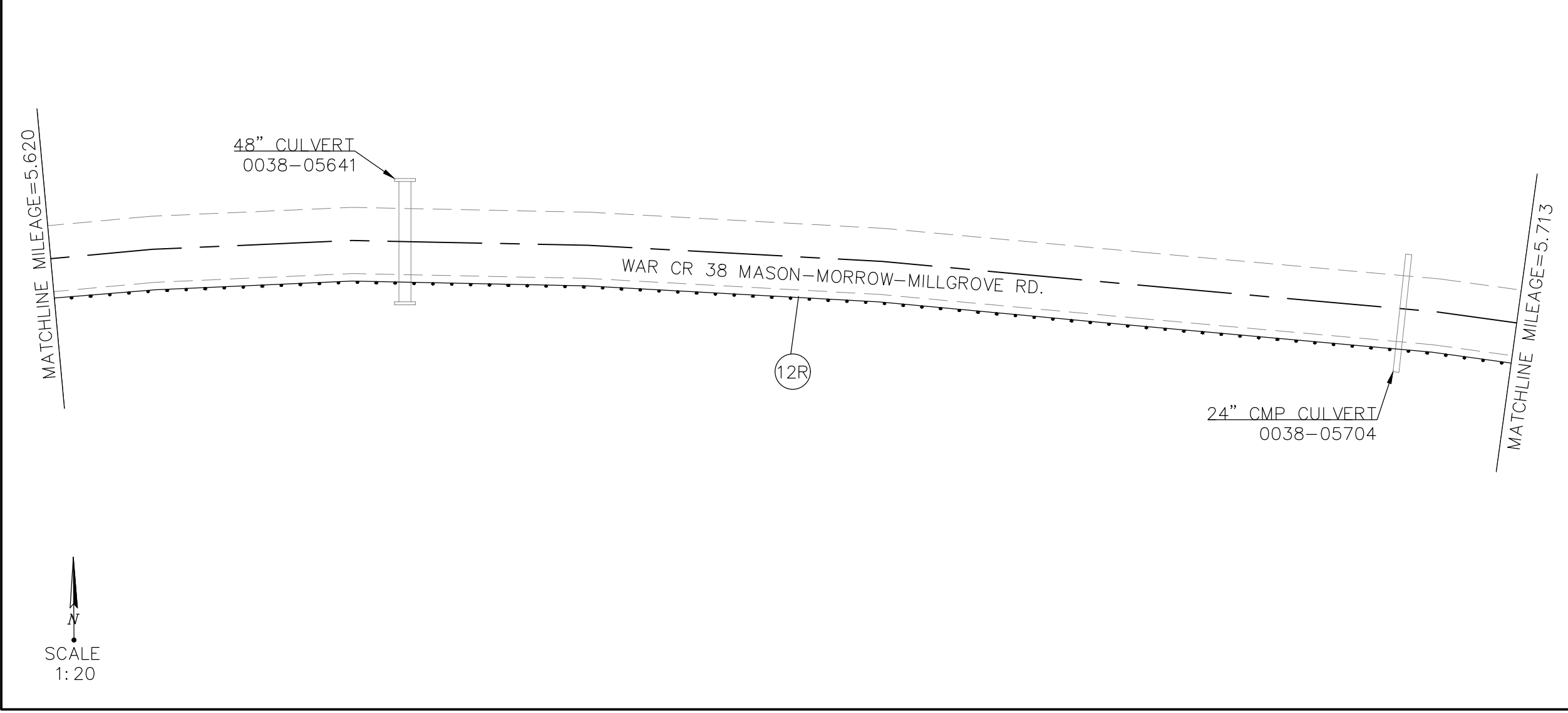
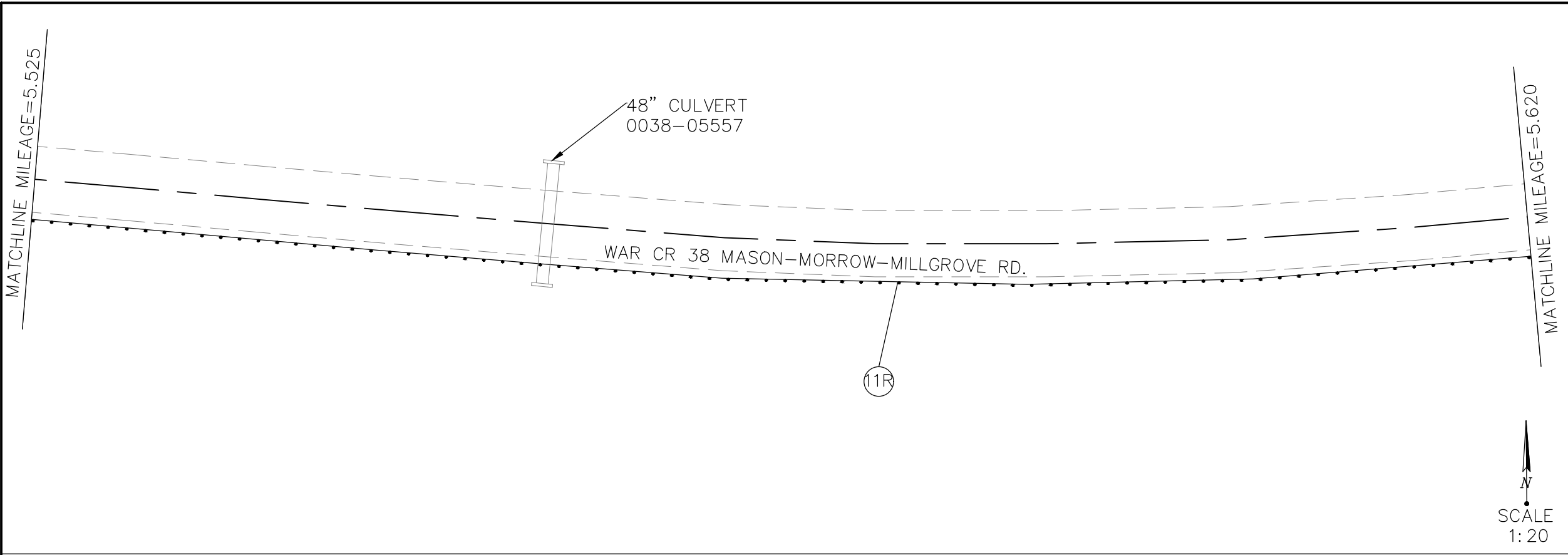
REF. NO.	202	202	606	606	606	606	606	606	606	626	630	630
9L	GUARDRAIL REMOVED, AS PER PLAN (FT)	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN (EACH)	GUARDRAIL, TYPE MGS (FT)	GUARDRAIL, TYPE MGS WITH LONG POSTS (FT)	GUARDRAIL, TYPE MGS LONG SPAN (FT)	ANCHOR ASSEMBLY, MGS TYPE E (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL) (EACH)	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (EACH)	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL (EACH)		
10L	448	1	448			1		5				
7R	215		237.5					4				
8R	448	1	448			1		5				
	226.5		179					3				
TOTAL TO GEN. SUMMARY	1,337.5	2	1,312.5			2		17				



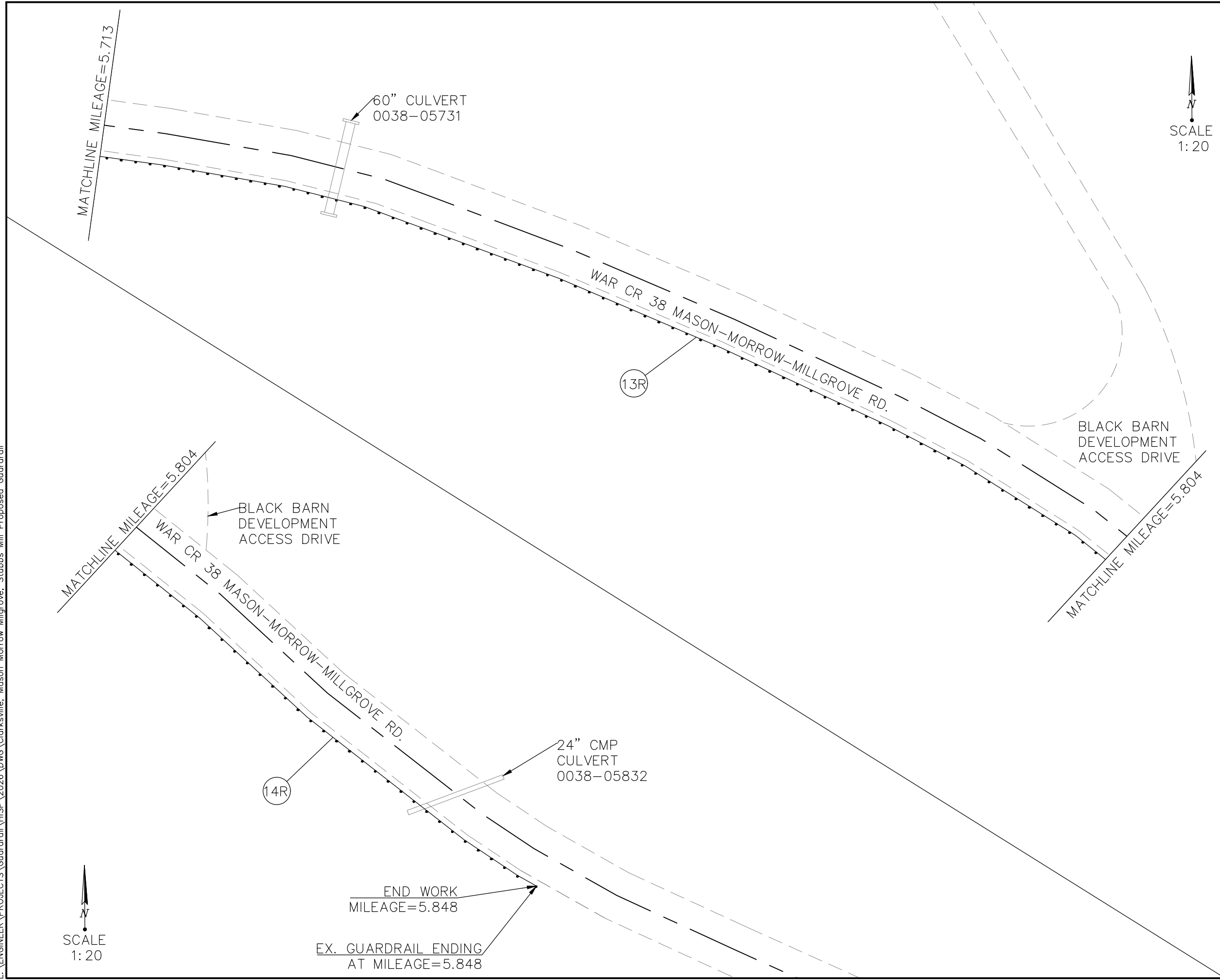
REF. NO.	202	202	606	606	606	606	606	606	606	626	630	630
	GUARDRAIL REMOVED, AS PER PLAN (FT)	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN (EACH)	GUARDRAIL, TYPE MGS (FT)	GUARDRAIL, TYPE MGS WITH LONG POSTS (FT)	GUARDRAIL, TYPE MGS LONG SPAN (FT)	ANCHOR ASSEMBLY, MGS TYPE E (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL) (EACH)	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (EACH)	REMOVAL OF GROUND MOUNTED SIGN SUPPORT AND DISPOSAL (EACH)	
9R	496		446			1			5			
10R	491.5		491.5						5			
TOTAL TO GEN. SUMMARY	987.5		937.5			1			10			

WAR-VAR GUARDRAIL FY-25

CR 38-MASON-MORROW-MILLGROVE RD.



REF. NO.	202	202	606	606	606	606	606	606	606	626	630	630
11R	GUARDRAIL REMOVED, AS PER PLAN (FT)	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN (EACH)	GUARDRAIL, TYPE MGS (FT)	GUARDRAIL, TYPE MGS WITH LONG POSTS (FT)	GUARDRAIL, TYPE MGS LONG SPAN (FT)	ANCHOR ASSEMBLY, MGS TYPE E (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL) (EACH)	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (EACH)	REMOVAL OF GROUND MOUNTED SIGN SUPPORT AND DISPOSAL (EACH)		
12R	499 488.5		499 488.5					5 5				
TOTAL TO GEN. SUMMARY	987.5		987.5					10				



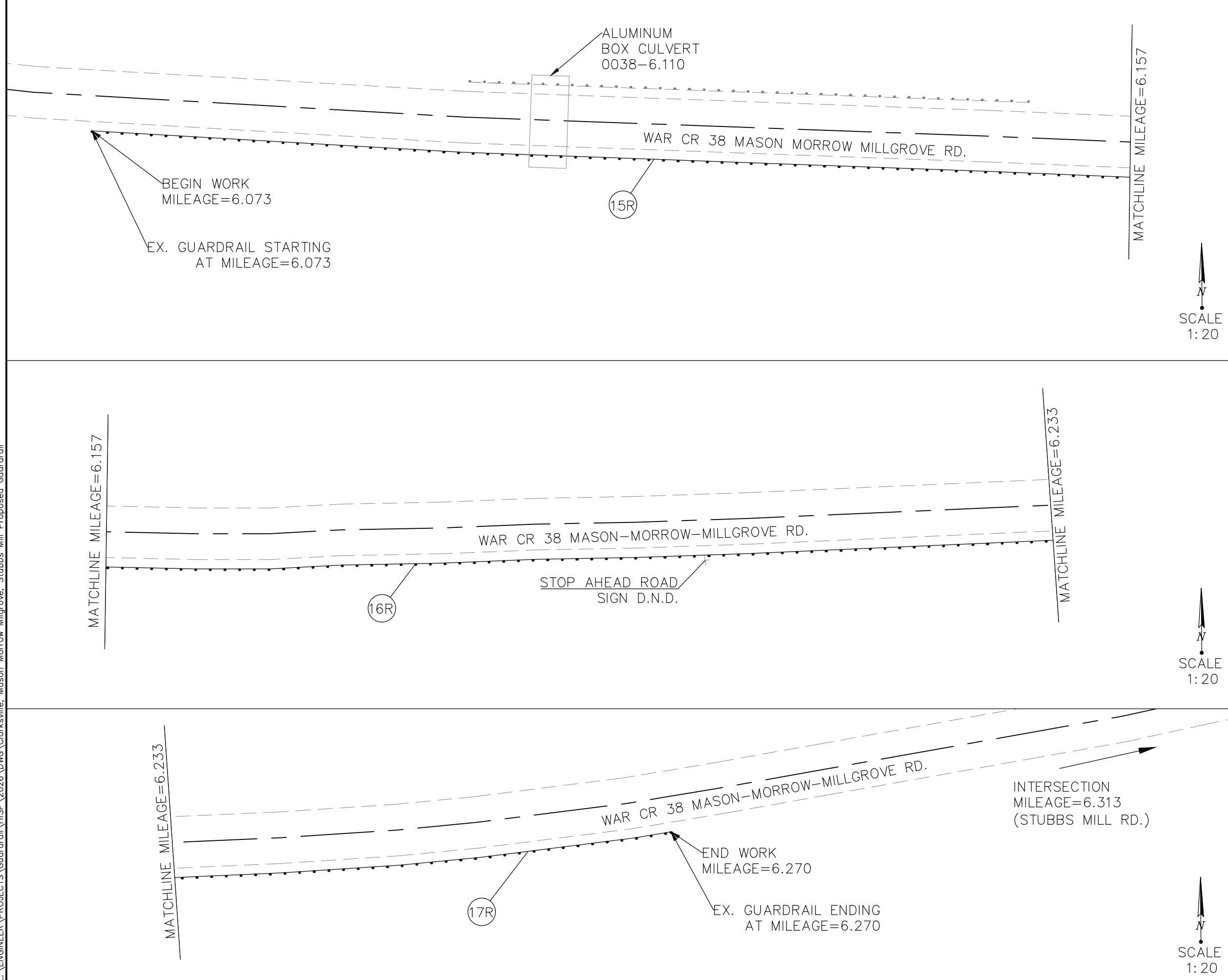
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REF. NO.	202	202	606	606	606	606	606	606	606	626	630	630
13R	GUARDRAIL REMOVED, AS PER PLAN (FT)	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN (EACH)	GUARDRAIL, TYPE MGS (FT)	GUARDRAIL, TYPE MGS WITH LONG POSTS (FT)	GUARDRAIL, TYPE MGS LONG SPAN (FT)	ANCHOR ASSEMBLY, MGS TYPE E (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	ANCHOR ASSEMBLY, MGS TYPE T (EACH)	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL) (EACH)	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (EACH)	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL (EACH)	
14R	478		478				184.5	1	5			
	234.5								3			
TOTAL TO GEN. SUMMARY	712.5		662.5					1	8			

WAR-VAR GUARDRAIL-FY25

CR 38-MASON-MORROW-MILLGROVE RD.



REF. NO.	202	203	606	606	606	606	606	626	630	630
15R	443	6	343							
16R	400		400							
17R	194.5		144.5							
TOTAL TO GEN. SUMMARY	1,037.5	6	887.5	50	50	2	11			

**WAR-VAR GUARDRAIL-FY25**

**CR 38-MASON-MORROW-MILLGROVE RD.**